CLAIMS

1.   A computer system comprising:

a portable computer having a LPC bus for peripheral devices;

a docking station to receive the portable computer and peripheral devices;

a PCI_Express fabric coupling the portable computer and the docking station, the PCI_Express fabric communicating commands or data between the LPC bus and the peripheral devices.

2.   The computer system of Claim 1 further comprising a hybrid PCI_Express downstream port coupled to the LPC bus and to a computer host for receiving PCI_Express packets and LPC commands or data for transmission along a PCI_Express fabric.

3.   The computer system of Claim 2 further comprising a hybrid PCI_Express upstream port couplable to a peripheral device and receiving PCI_Express packets and LPC Transaction Packets from the PCI_Express fabric.

4.   The computer system of Claim 2 wherein the hybrid PCI_Express downstream port receives a half-duplex LPC bus Transaction Packet and converts it to two full duplex PCI_Express packets for transmission on the PCI_Express fabric.

5.   The computer system of Claim 4 further comprising a LPC packet manager which places a long wait sync clock signal on the LPC bus while awaiting a reply to a bi-directional LPC transaction data packet.

6.   In a computer docking station to receive a portable computer and peripheral devices, a communications link between the portable computer and the peripheral devices comprising:

a PCI_Express fabric couplable to the portable computer and at least one of the peripheral devices, the PCI_Express fabric communicating commands or data between a computer in the docking station and a peripheral device connected thereto.

7.   The computer docking station of Claim 6 further comprising a hybrid PCI_Express downstream port couplable to a LPC bus of a computer and to a computer host for receiving PCI_Express packets and LPC Transaction Packets for transmission along a PCI_Express fabric.

8.   The computer docking station of Claim 7 further comprising a hybrid PCI_Express upstream port couplable to a peripheral device and receiving LPC Transaction Packets from the PCI_Express fabric.

9.   The computer docking station of Claim 7 wherein the hybrid PCI_Express downstream port receives a half-duplex LPC bus Transaction packet and converts it to two full duplex PCI_Express packets for transmission on the PCI_Express fabric.

10.   The computer docking station of Claim 9 further comprising a LPC packet manager which places a long wait sync clock signal on the LPC bus while awaiting a reply to a bi-directional LPC transaction data packet.

11.   A modified PCI_Express fabric comprising:

a hybrid PCI_Express downstream port couplable to a computer LPC bus and to a computer host for receiving PCI_Express packets and LPC data or commands for transmission along a PCI_Express fabric; and

a hybrid PCI_Express upstream port couplable to a computer peripheral device and receiving PCI_Express packets and packetized LPC data or commands from a PCI_Express fabric and separating out the LPC data or commands for use by the computer peripheral device.

12.   The PCI_Express fabric of Claim 11 further comprising a PCI_Express fabric coupled between the hybrid PCI_Express downstream port and the hybrid PCI_Express upstream port.

13.   The PCI_Express fabric of Claim 11 wherein the hybrid PCI_Express downstream port receives a half-duplex LPC bus Transaction Packet and converts it to two full duplex PCI_Express packets for transmission on the PCI_Express fabric.

14.   The PCI_Express fabric of Claim 13 further comprising a LPC packet manager which places a long wait sync clock signal on the LPC bus while awaiting a reply to a bi-directional LPC transaction data packet.

15.   A method of coupling a LPC bus Transaction Packet across a boundary between a portable computer and a docking station utilizing a PCI_Express fabric comprising:

controlling the data flow on the PCI_Express fabric to insert at a first location on the PCI_Express fabric PCI_Express packets corresponding to LPC Transaction Packet into unused portions of the PCI_Express traffic,

receiving PCI_Express packets at a second location on the PCI_Express fabric and extracting those packets corresponding to the LPC Transaction Packets;

performing an LPC task.

16.   The method of Claim 15 further comprising converting half-duplex LPC bus Transaction Packets into two full duplex PCI_Express packets for transmission on the PCI_Express fabric.

17.   In a method of coupling an LPC bus across a boundary between a portable computer and a docking station, a method of sending serial IRQ or DMA requests from a peripheral device to a processor, comprising:

generating in an LPC slave coupled to the peripheral device a PCI_Express upstream packet requesting a serial IRQ request or DMA request;

injecting the PCI_Express upstream packet into the PCI_Express fabric;

recovering the PCI_Express upstream packet in the docking station;

utilizing the recovered PCI_Express upstream packet to generate sideband signals to an LPC controller.

18.   The method of Claim 17 further comprising:

generating a serial IRQ or DMA request in the LPC controller.